

# Chapter 1

## INTRODUCTION

The Kissimmee Basin is one of four regional planning areas in the South Florida Water Management District (**Figure 1**). The Kissimmee Basin (KB) Planning Area covers approximately 3,500 square miles and includes parts of Orange, Osceola, Polk, Highlands, Okeechobee, and Glades counties (**Figure 2**). The KB Planning Area shares common boundaries with adjacent water management districts. The northern and eastern portions of the boundary are shared with the St. Johns River Water Management District, while the western boundary is adjacent to the Southwest Florida Water Management District.

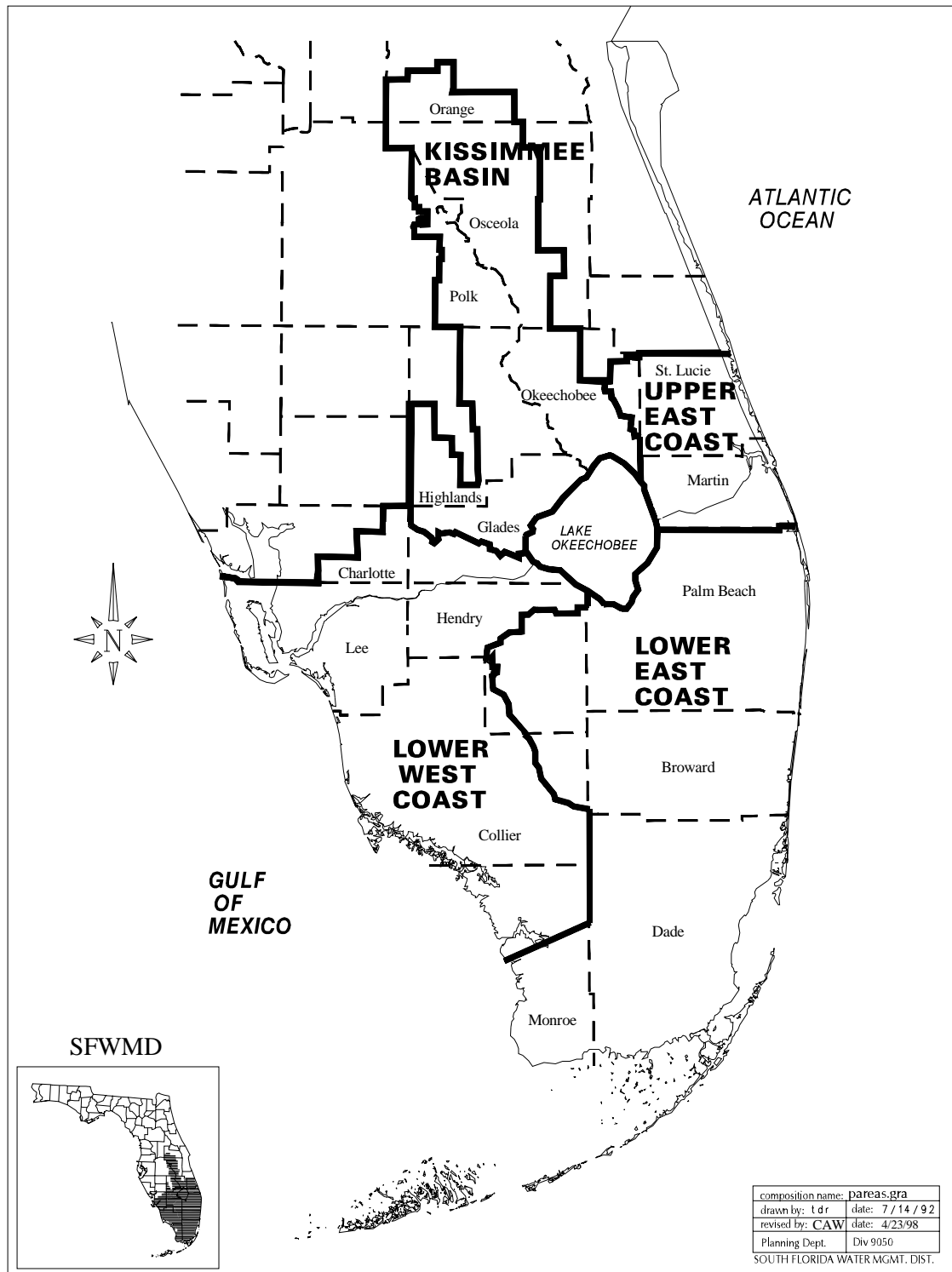
Each of the three water management districts have identified areas that may experience harm to natural resources due to projected ground water withdrawals. The St. Johns and South Florida water management districts have identified the Orange-Osceola County Area as an area that may potentially experience harm to natural systems due to the anticipated combined ground water use occurring within each district. The SFWMD has also identified portions of Highlands and Glades counties as a problem area due to the limited supply of surface water from Lake Istokpoga. Finally, the Southwest Florida Water Management District has identified several stressed lakes along the Lake Wales Ridge which have been linked to declines in Floridan aquifer levels.

The KB Planning Area is experiencing high growth in the urbanized areas in the north and moderate agricultural increases in the south. Agricultural water demand, which accounts for 75 percent of the overall water demand in the KB Planning Area, is expected to increase by approximately 55 percent through the planning horizon of 2020. At the same time, the region's population is projected to increase by 89 percent, from about 363,000 to almost 687,000 people. Overall water demand is projected to increase by about 63 percent to over 242,000 million gallons per year by 2020.

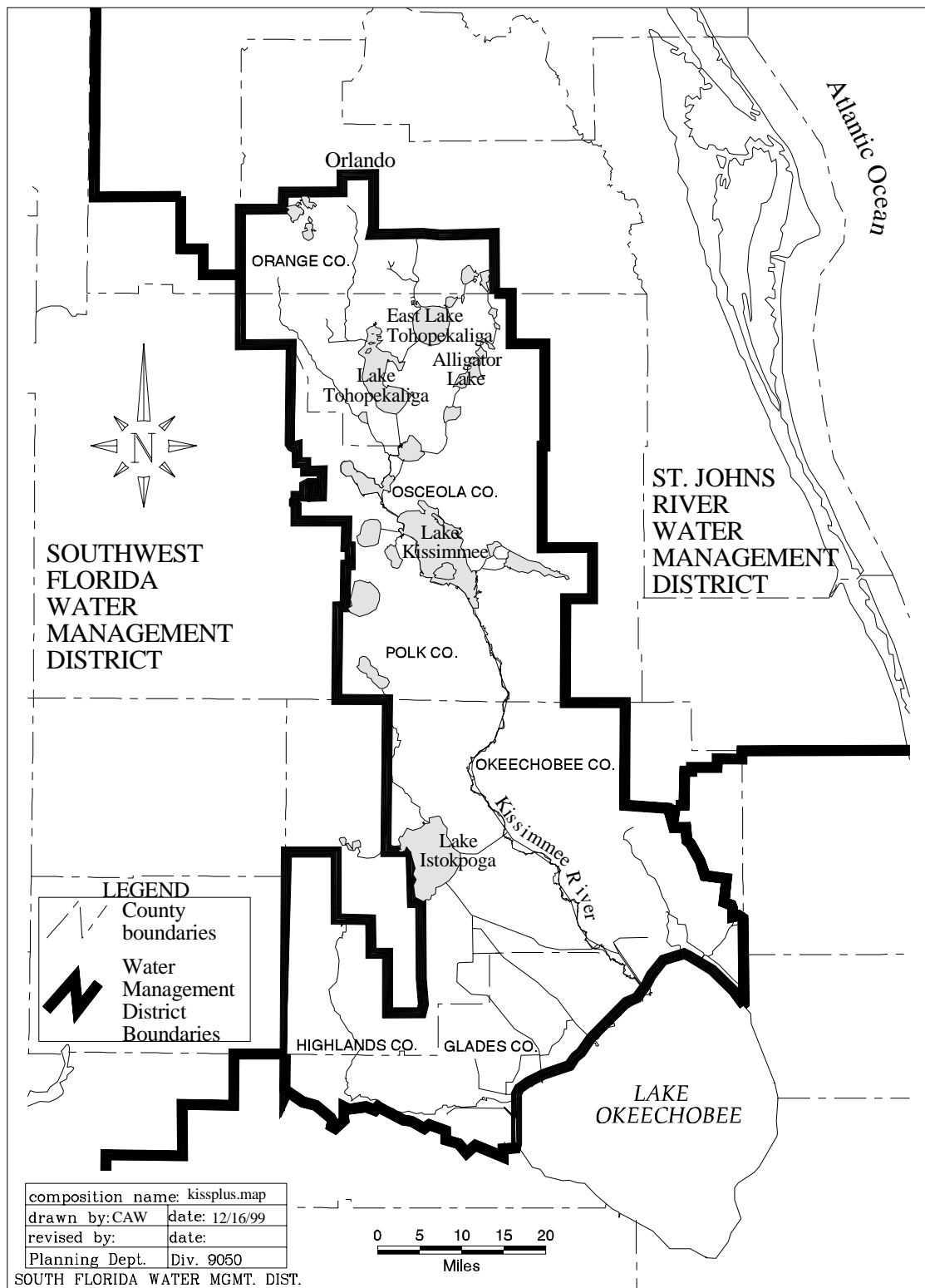
## PURPOSE

The purpose of the KB Water Supply Plan is to provide a framework for future water use decisions to provide adequate water supply for urban areas, agriculture, and the environment through 2020. The plan estimates the future water supply needs of urban areas and agriculture, weighs those demands against historically used water sources, and identifies areas where these demands cannot be met without possibly harming the resource and environment, including wetlands. The plan evaluates the potential of several alternative water source options to meet any unmet demand and makes recommendations for their development.

An important part of the planning process has been identifying constraints to water supply and exploring opportunities to optimize use of the resource. This involved extensive public input from the KB Water Supply Plan advisory committee, whose members represent a variety of disciplines and interests, such as local governments, public



**Figure 1.** Regional Planning Areas.



**Figure 2.** Kissimmee Basin Planning Area.

water supply utilities, environmental interests, and agriculture, as well as the general public. In addition, a focus group (subcommittee) for Lake Istokpoga-Indian Prairie Basin was formed by the advisory committee to address water resource problems within that basin.

The location and nature of the KB Planning Area warrants intensive coordination with adjacent water management districts, particularly in water resource investigation, water resource planning, water resource regulation, and water shortage declarations. To better coordinate these activities, the three water management districts have entered into a Memorandum of Understanding, which outlines guidelines for coordination in each of these four areas. In addition, the SFWMD has an agreement with the Seminole Tribe of Florida for the Brighton Reservation that outlines the tribe's entitlement of water within the Lake Istokpoga-Indian Prairie Basin.

## **BASIS OF WATER SUPPLY PLANNING**

The District's water supply planning functions are guided by the directives and policies embodied in the District's Water Supply Policy Document (SFWMD, 1991), State Water Policy (Chapter 62-40, F.A.C.), Chapter 373, F.S., the State Comprehensive Plan (Chapter 187, F.S.), and delegation of authority from Florida Department of Environmental Protection (FDEP). In addition, the plan meets the legislative requirements of the 1996 Governor's Executive Order 96-297 and the 1997 water supply planning provisions of Section 373.0361, F.S.

Regional water supply plans are to include:

- A twenty-year planning horizon
- A quantification of the water supply needs
- A list of water source options for water supply development which will meet the identified needs
- For each water source option, the estimated amount of water available and the estimated costs
- A list of water supply development projects that meet the criteria in Section 373.0831(4)
- A list of those water resource development projects that support water supply development
- For each water resource development project listed:
  1. An estimate of the amount of water to become available
  2. The timetable and the estimated costs
  3. Sources of funding and funding needs
  4. Who will implement the project and how it will be implemented

- A funding strategy
- Consideration of how the options serve the public interest or save overall costs
- Technical data and information
- Minimum flows and levels and associated recovery and prevention strategies established within the planning region (Section 373.0361, F.S.)

## PLAN VISION, GOAL, AND OBJECTIVES

The KB Water Supply Plan advisory committee adopted the following vision, goal and objectives to guide development of the water supply plan to ensure the water needs of this region will be met through the year 2020.

### Plan Vision

The KB Water Supply Plan advisory committee adopted the State's water resource goal in the State Comprehensive Plan (Chapter 187, F.S.) as the vision for the KB Water Supply Plan:

Florida shall assure the availability of an adequate supply of water for all competing uses deemed reasonable and beneficial and shall maintain the functions of natural systems and the overall present level of surface and ground water quality. Florida shall improve and restore the quality of waters not presently meeting water quality standards.

### Plan Goal

The advisory committee adopted the following draft goal specific to this region for the KB Water Supply Plan:

Identify sufficient sources of water and funding to meet the needs of all reasonable-beneficial uses within the KB Planning Area for the year 2020 during a drought event that has the probability of occurring no more frequently than once every ten years, while sustaining the water resources and related natural systems.

### Plan Objectives

To ensure the KB Water Supply Plan addresses the specific needs of the region, the advisory committee developed the following draft regional objectives (no implied priority):

**Objective 1. Water Sources:** Optimize the use of all water sources.

**Objective 2. Natural System Protection:** Protect natural systems from harm due to water uses.

**Objective 3. Level of Certainty:** Identify options that will provide a 1-in-10 year level of certainty for all existing and projected reasonable-beneficial uses.

**Objective 4. Compatibility with Local Governments:** Promote compatibility of the KB Water Supply Plan with tribal and local government land use decisions and policies.

**Objective 5. Linkage with Other Regional Planning efforts:** Promote compatibility and integration with other related regional water resource planning efforts, including, but not limited to, Kissimmee River Restoration, Kissimmee Chain of Lakes, the Restudy, and Southwest Florida Water Management District and St. Johns River Water Management District water supply planning efforts without detriment to the Kissimmee Basin region.

**Objective 6. Conservation of Water Sources:** Promote water conservation and efficient use of water sources.

**Objective 7. Water Supply Demands:** Refine water supply demand projections for all reasonable-beneficial uses for average year and the 1-in-10 year level of certainty.

**Objective 8. Funding:** Identify adequate sources of funding to support water resource development and water supply development options identified in the plan.

**Objective 9. Water Resource Protection:** Protect water resources (aquifers, lakes) from harm due to water uses, including preventing harmful movement of saline water within the Floridan Aquifer System as a result of water use.

The goal and associated objectives captured the expectations and issues in the KB Planning Area, and in turn, provided direction for the planning process. Topics scheduled for committee discussion, research and analytical work, and formulation of final recommendations centered on these objectives. Completion of the plan's initial goal and objectives marked the transition into the analytical phase of the process.